

Toxic chemicals used for stain and water resistance pollute people and the planet, **but alternatives are available.**

PFAS (per- and polyfluoroalkyl substances) are a large class of chemicals that companies currently put in a wide range of products. PFAS have been linked to serious health impacts including cancer, increased cholesterol, and suppression of the immune system. Manufacturers use PFAS to provide stain and water resistance in home furnishings such as upholstered furniture, tablecloths, and bedding. They also put these chemicals in clothing such as rain jackets, hiking pants, and snow gear.

Treated textile products leave a toxic trail of pollution.

Unfortunately, these uses of PFAS leave a toxic trail of pollution that results in contamination of drinking water, homes, schools, and workplaces—and eventually, our bodies. First, companies that manufacture the PFAS pollute air and water with these highly persistent chemicals. Then, when we use the treated textile products, they emit PFAS into our indoor air, causing these chemicals to build up where we live, learn, and work, and in our bodies. Finally, when we are finished using the products and they go to landfills and incinerators, the PFAS treatments keep contaminating water and air.

As a result of this toxic trail, PFAS have been found in drinking water, indoor and outdoor air, breast milk, and the blood of nearly every U.S. resident tested.









Research has found widespread use of PFAS in household items and apparel sold by major retailers.

Toxic-Free Future tested three kinds of commonly used products, purchasing a total of 60 items from 10 major retailers. Researchers tested for the presence of PFAS in outdoor apparel, bedding, tablecloths, and napkins. The research found the following:

- **PFAS are commonly used for stain and water resistance**: 72% of items with this type of labeling contained PFAS.
- Multiple types of stain- or waterresistant consumer products contained PFAS, including mattress pads, comforters, tablecloths, napkins, rain jackets, hiking pants, and shirts.
- Manufacturers have been using a mixture of PFAS that includes compounds banned in other countries.
- Alternatives to PFAS for stain and water resistance are in use—researchers found items in each category that were marketed as stain- and/or water-resistant yet appeared to be PFAS-free.

We have the solutions we just need leaders to implement them.

State and federal leaders should pass polices to end the use of PFAS in all textiles, establish comprehensive chemicals policies to replace harmful chemicals with safer alternatives, ensure cleanup of contaminated communities, and wield government purchasing power to avoid PFAS.

Companies that make home furnishings and apparel should adopt policies to phase out PFAS use and move to safer methods, disclose all product ingredients, and keep the public updated on progress.

Retailers should "mind the store" by adopting public corporate chemical policies to ensure all textile products available for sale are free of PFAS and contain only safer substitutes.

We can envision a future in which the clothes we wear and all products in our homes, schools, and workplaces are free of toxic chemicals. PFAS—incredibly persistent, and so mobile that they have contaminated drinking water for millions of people clearly don't belong. To work towards this future, we need to phase out the "forever chemicals" that jeopardize it.



"I am really excited to know that there are alternatives to PFAS as this huge class of synthetic chemicals pollutes all of us and is associated with a host of adverse health effects such as elevated cholesterol, kidney cancer, and immune suppression."

Linda S. Birnbaum, Ph.D., D.A.B.T., A.T.S. Scientist Emeritus and Former Director, National Institute of Environmental Health Sciences and National Toxicology Program Scholar in Residence, Nicholas School of the Environment, Duke University



Learn more at toxicfreefuture.org/pfas-textiles